### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001415 Address: 333 Burma Road **Date Inspected:** 27-Jan-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 900 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006 **Component:** Tower and OBG Fabrication

## **Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Orthotropic Box Girder (OBG) and Tower Mock Up:

Bay 7

The QA Inspector performed dimensional inspections of Floor Beam plates detail "WT1" typical weld termination. The following plates were measured: FB002-02; FB002-04; FB007-06; FB008-01; FB008-03, FB008-04; FB008-06; FB008-03; FB008-04; FB015-03; FB016-01; FB016-02 and FB016-04. ZPMC Weld Terminations Details drawing GN3 detail "WT1" states the "Y" dimension weld holdback distance is required to be between 7 mm and 19 mm. Actual Y weld holdback distances were observed to vary between 0 mm and 20 mm. Detail "WT1" states the X1 dimension weld holdback distance is required to be between 3 mm and 9 mm. Actual "X1" weld holdback distances were observed to vary between 2 mm and 25 mm. All X and "Y" measurements were compiled on a spreadsheet that is to be submitted to Caltrans Engineering for evaluation. Some of the corners of the plates have a rounded shape instead of the straight edge as shown on the construction drawing. See the photographs belwo for additional information.

During this shift, the QA Inspector observed no ZPMC personnel performing welding in bay 7.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

See above for summary of conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer